







DRY FARMING AND CAPILLARITY

MOST people have heard of dry farming; but very few know exactly what it is and how it is possible to carry it on. Yet it depends upon one of the most common principles of physics. Of course all plants have to have moisture about their roots in order to live; so even in dry farming this has to be the case. The experient necessary then is to retain near the roots what rain does fall on the ground. One good rain—if all the water could be kept on hand—would be sufficient to raise a crop.

In order to understand how the water absorbed by the ground is retained by the dry farmer to a great extent, the subject of capillarity will have to be studied somewhat. If a blotter be placed at one end in an inkwell, we all know that the ink will rise up into the blotter by what is known as capillary attraction—and the liner the holes in the blotter the farther will the ink rise; that is, to a certain extent. A wick in oil or water will do the same thing. Imagine such a wick in a bottle of water with the end just sticking out of the neck of the bottle and the other end at the bottom of the hottle—what will take place? Why, the top end immediately becomes very wet, and the water there is soon evaporated; but just as often as it is evaporated some comes up from the bottle of water is lost by evaporation.

This is exactly what happens in a dry

y evaporation.

This is exactly what happens in a dry ountry after a rainfall. The water at the This is exactly what happens in a dry country after a rainfall. The water at the surface is evaporated, and the water from seneath comes up to the surface and is evaporated, till finally the ground for several feet down is as dry as a chip, but firm. The whole secret of dry farming is in preventing this top evaporation from taking blace. The only way to do it is either to but a waterproof layer on top, which is impracticable because the plants have to have air also, or else cover the surface with a dry mulch of such coarseness that the interstices or passageways are too large for apillary attraction to raise the water from the smaller ones below. Of course this latter method is the one that is followed, and on ooking at a dry farm one would think from the looks of the top soil that no rain had ever allen but on scraping away the diet or mulch for a few inches he would think the lower earth moist and all right. —A. L. Hodges

CONTENTS OF THIS ISSUE

EDUCATING FOR BUSINESS SUCCESS. By Andrew Carnegie The value of a college course discussed by the Ironmaster.

Illustrated by S. J. Woolf

A CASE OF NOBODY HOME...... By Sewell Ford Describing the giving of a seed of kindness to Mr. and Mrs. Hackett Wells.

Illustrated by F. Vaux Wilson

By Roy Norton HONEST JOE. A charming tale of a poor old Westerner that refused to surrender

Illustrated by Robert W. Amick

THE GRUNT OF THE PIGSKIN Describing the intricacies and simplicities of the latest developme in football.

Illustrated from photographs

THE VALLEY OF FEAR By Sir Arthur Conan Doyle The last instalment, bringing out the amazing climax.

Illustrated by Arthur I. Keller

THE MODEL CHILD By Richard Dehan What a child culturist did with Tom and Leila's helpless infant. Illustrated by Nell I. Hatt

THE WOLVES OF WALL STREET By Charles A. Collman How blackmailers flourish in the financial district, Illustrated by E. Hopper

"THE WAY OF THESE WOMEN"

A NEW serial begins in our next SENDAY MAGAZINE. It is by one of the most popular and proline of modern storytellers, an author who has gained his high place because he always has good stories to tell and knows how to tell them.

E. Phillips Oppenheim has won a position on both sides of the Atlantic through the strength and originality of his plots. He unitemelodrama with ideas and literary style, which make a strong som bination. He realizes that his first mission is to be interesting, and to become more and more interesting as the story works seadil toward a gripping climax that is not foreseen.

THE WAY OF THESE WOMEN is the latest story by the en ergetic Mr. Oppenheim. On the surface it is just a gripping tale in which my stery begins in the very first chapter, -the kind of my a tery that makes one seek an explanation after the instalment is faid aside

And this mystery leads up to a murder, which has all those slements which make human beings forget their ordinary interests in eager desire to arrive at the truth. It is a daring story in more ways than one that Mr. Oppenheim has written, and yet it is conventional in its morals. The daring lies chiefly in the way in which he works out the problems of the chief characters, all of whose live are powerfully affected by the murder mystery.

It is this development that is likely to make you think over the story, to make you feel that the people whom he makes so interesting and whom you feel you are glad to know are either very extraordinary, or that the author has dared to override storytelling conventions to reveal deeper truths of life.

But you do not have to think at all, if you don't want to. That is where the skilled craftsmanship of Mr. Oppenheim scores. Sir Jermyn Annerley is a tine type of Englishman, who has won distinction in sport and as a playwright. He is the hero. Sybil Cluley, the young actress all London is raving about, is the star of Sir Jermyn's plays. She is one of the heroines. The other is Duchess. de Savers, half English, half French, beautiful and fascinating. Lord Lakenham is the villain.

The clashes start on the first page of the story, and there is a succession of them until the very end. Both women are in love with Sir Jermyn, and Lord Lakenham is in love with one of them. All an interesting, and two of the four are lovable from the start. As to one of the heroines, you are likely to change your mord before the end.

THE WAY OF THESE WOMEN is a good story and a fine serial. It begins in our next issue.